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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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10/691,415

10/22/2003

Richard D. Dettinger

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IBM CORPORATION, INTELLECTUAL PROPERTY LAW  
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EXAMINER

PHAM, KHANH B

ART UNIT

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PAPER

**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.

<b>Office Action Summary</b>	<b>Application No.</b> 10/691,415	<b>Applicant(s)</b> DETTINGER ET AL.	
	<b>Examiner</b> Khanh B. Pham	<b>Art Unit</b> 2166	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

### Status

- 1) ☒ Responsive to communication(s) filed on 24 June 2008.
- 2a) ☒ This action is **FINAL**.                      2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

### Disposition of Claims

- 4) ☒ Claim(s) 1-3,5-7 and 9 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-3,5-7 and 9 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

### Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All    b) ☐ Some \*    c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

### Attachment(s)

- |  |   |
|--|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892)                     | 4) <input type="checkbox"/> Interview Summary (PTO-413)           |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____                                      |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08)          | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date _____  | 6) <input type="checkbox"/> Other: _____                          |

## DETAILED ACTION

### ***Claim Rejections - 35 USC § 103***

1. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

2. **Claims 5-7, 9** are rejected under 35 U.S.C. 103(a) as being unpatentable over Goiffon et al. (US 6,453,312 B1), hereinafter "Goiffon '312", in view of Singh (US 2003/0204759 A1), hereinafter "Singh".

**As per claim 5**, Goiffon '312 teaches a method of searching fields of a data repository using state-sensitive term expansion, comprising:

- "receiving, from a user, a query containing at least one condition for searching at least one field of the data repository, wherein the at least one condition includes at least one base search term" at Col. 14 lines 44-65 and Figs. 4-8;
- "obtaining one or more parameters indicative of a state of an environment in which the query is to be executed" at Col. 14 lines 44-65, Col. 23 lines 30-40;
- "obtaining, based on the one or more parameters and the base search term, one or more expanded search terms at Col. 15 lines 3-22;

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- “modifying the query to contain one or more conditions based on the one or more expanded search terms” at Col. 17 lines 5-30.

Goiffon '312 teaches at Col. 23 lines 30-40 different degrees of expansion are based on one or more parameters such as system performance requirement, available processing and memory resources, but does not explicitly teach “one or more parameters comprise at least one parameter indicative of a date or time of day” as claimed. However, it is obvious that system performance requirement, available processing and memory resources depend upon date or time of the day. For example, Singh teaches at [0051] that system utilization “depend on the time of the day, the day of the week”. Thus, it would have been obvious to one of ordinary skill in the art at the time of the invention was made to combine Singh with Goiffon's teaching so that the system utilization can be determined correctly based on time of the day to efficiently use of the system resources without overloading the resources.

**As per claim 6,** Goiffon '312 and Singh teach the method of claim 5, Goiffon '312 also teaches: wherein “obtaining one or more expanded search terms comprises selecting a set of expanded terms from a plurality of sets of expanded terms, each set corresponding to a different level of expansion” at Col. 15 lines 3-63.

**As per claim 7**, Goiffon '312 teaches the method of claim 6, wherein “selecting a set of expanded terms from the plurality of sets of expanded terms comprises: generating a level of expansion based on the one or more parameters; and selecting a set of expanded search terms corresponding to the generated level of expansion” at Col. 15 lines 3-63.

**As per claim 9**, Goiffon teaches the method of claim 5, wherein “the at least one parameter indicative of a date or time of day is indicative of when the query is to be executed” Col. 14 lines 44-65 and Figs. 4-8.

3. **Claims 1-3** are rejected under 35 U.S.C. 103(a) as being unpatentable over Goiffon et al. (US 6,226,792 B1), in view of Goiffon et al. (US 6,453,312 B1), hereinafter “**Goiffon '792**” and “**Goiffon '312**”, and further in view of “**Singh**”.

**As per claim 1**, Goiffon '792 teaches a method of searching fields of data repository using dynamic term expansion comprising:

- “obtaining a query containing at least one condition for searching at least one field of the data repository, wherein the at least one condition includes at least one base search term” at Col. 28 lines 21-38 and Fig. 10;
- “generating a pointer to the identified set of expanded search terms” at Col. 19 lines 1-6;
- “prior to executing the query, retrieving the query and the information related to the pointer and modifying the query to contain one or more

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conditions based on one or more expanded search terms retrieved using the pointer” at Col. 28 lines 39-65.

Goiffon ‘792 does not explicitly teach “storing the query and information related to the pointer” as claimed. However, Goiffon ‘312 teach a similar method, including the step of storing the query and information related to the pointer” at Col. 18 lines 15-25 and Col. 21 lines 18-25. Thus, it would have been obvious to one of ordinary skill in the art at the time of the invention was made to combine the two Goiffon references in order to allow query to be executed in batch or at a later time, in order to reduce the workload on the database.

Goiffon ‘312 teaches at Col. 23 lines 30-40 different degrees of expansion are based on one or more parameters such as system performance requirement, available processing and memory resources, but does not explicitly teach “one or more parameters comprise at least one parameter indicative of a date or time of day” as claimed. However, it is obvious that system performance requirement, available processing and memory resources depend upon date or time of the day. For example, Singh teaches at [0051] that system utilization "depend on the time of the day, the day of the week". Thus, it would have been obvious to one of ordinary skill in the art at the time of the invention was made to combine Singh with Goiffon's teaching so that the system utilization can be determined correctly based on time of the day to efficiently use of the system resources without overloading the resources.

**As per claim 2**, Goiffon '792 teaches the method of claim 1, further comprising "modifying the identified set of expanded search terms after generating the pointer" at Col. 31 lines 1-17 and Fig. 15.

**As per claim 3**, Goiffon '792 teaches the method of claim 1, further comprising "recreating the pointer based on the information related to the pointer" at Fig. 15, 1514.

### ***Response to Arguments***

4. Applicant's arguments filed June 24, 2008 have been fully considered but they are not persuasive. The examiner respectfully traverses applicant's arguments.

Regarding claim 1, applicant argued that "the prior art of references even when combined do not teach or suggest "obtaining one or more parameters ... indicative of a date or time of day," "obtaining, based on the one or more parameters and the base search term, one or more expanded search terms", and "modifying the query to contain one or more conditions based on one or more expanded search terms, " as recited in claim 1". On the contrary, Goiffon '312 teaches at Col. 23 lines 30-40 different degrees of expansion are based on one or more parameters such as system performance requirement, available processing and memory resources :

**"varying degrees of expansion** could be provided in response to the initial user request to view a selected Concept Element within the concept tree, as **may be dictated by system performance requirement, and available processing and memory resource"**

(Goiffon '312, Col. 23 lines 30-40).

Goiffon '312 therefore teaches that the number of obtained expanded search terms depends upon "system performance requirement, and available processing and memory resources." For example, low system's processing and memory resource will result in less number of obtained expanded search terms.

On the other hand, Singh teaches at [0051] that the utilization values for a system resource is varying, depend on the time of day, the day of the week. For example, during daytime the system loads may fluctuate more often because different working customers request different services and the system utilization is more stable at nighttime or weekends. Singh therefore presents the fact that "system performance requirement, available processing and memory resources" depends on time of the date or day of the week.

In summary, Goiffon's teaches the number of expanded search terms depends upon system utilization or available resources, and Singh suggest time of the date or date of the week effects system utilization or available resource. Thus, combining Goiffon and Singh would result in obtaining one or more search terms based on time of the date or date of the week as claimed.



***Conclusion***

5. **THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Khanh B. Pham whose telephone number is (571) 272-4116. The examiner can normally be reached on Monday through Friday 7:30am to 4:00pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Hosain Alam can be reached on (571) 272-3978. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/Khanh B. Pham/  
Primary Examiner  
Art Unit 2166

October 15, 2008